Virtual Airspace Simulation Technology Real Time Simulation (VAST-RT)

Overview

At the last TIM we described our goals as:

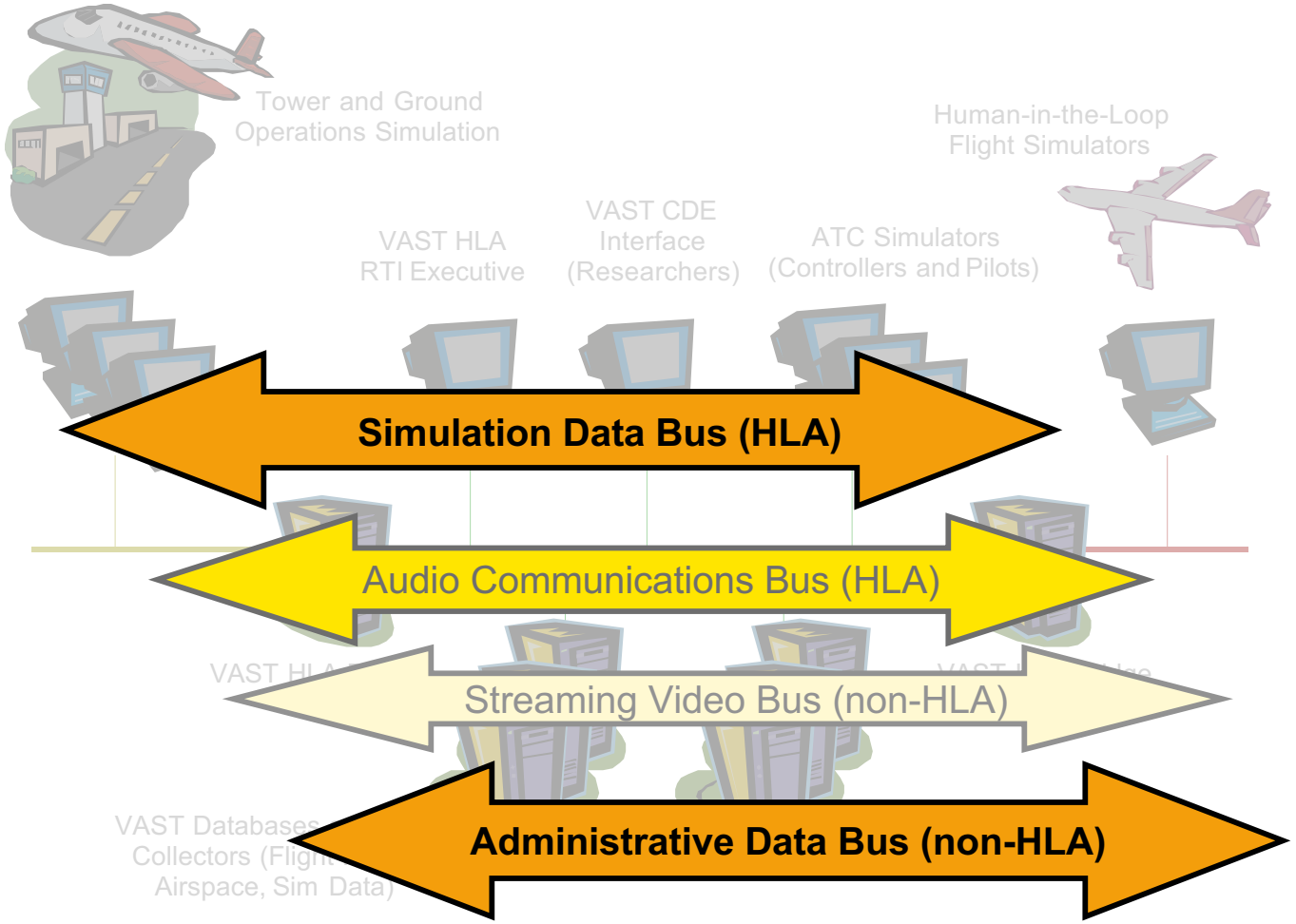
- **producing an HLA architecture for real-time, human-in-the-loop simulations technologically capable of simulating significant portions of the NAS.**

- **producing an air traffic generator capable of maneuvering an aircraft from the departure gate of one airport of a city-pair to the arrival gate of the other airport in the city pair including all appropriate NAS elements along the way.**

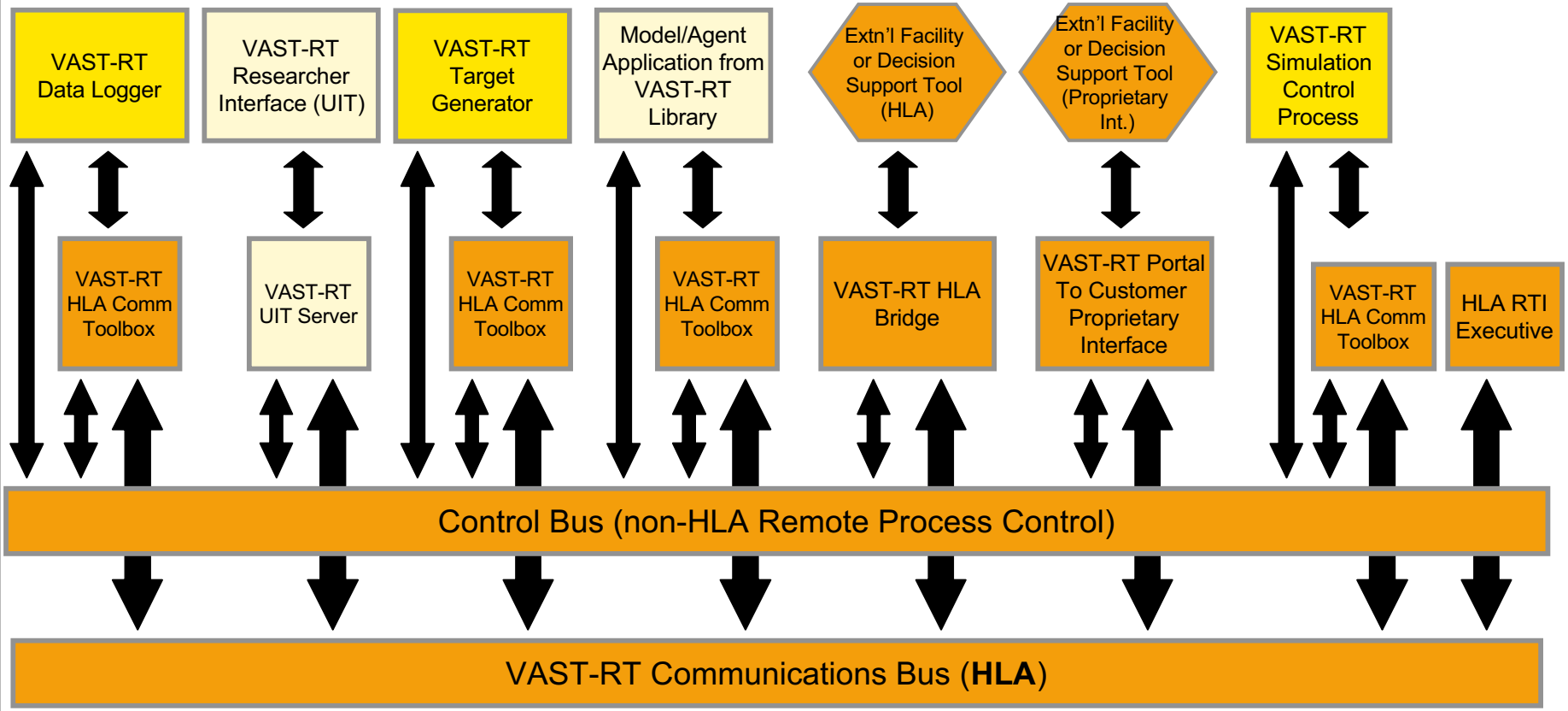
- **producing an extensible, robust interface to the FutureFlight Central, Crew Vehicle Systems Research Facility, Vertical Motion Simulator Complex, and the Airborne Operations Laboratory.**

CONCEPTUAL DESIGN

The VAST-RT Architecture provides the data buses to interconnect all of the participants



COMPLETE SYSTEM DESIGN



Delivery in Capability One

Full Delivery in Capability Two

In planning stages

SUMMARY

VAST-RT has produced an HLA architecture for real-time, human-in-the-loop simulations technologically capable of simulating significant portions of the NAS.

VAST-RT air traffic generator exceeds the city pair design goal by allowing research to occur between multiple centers, city - TRACON and other NAS element combinations.

VAST-RT has produced an extensible, robust interface to the FutureFlight Central, Crew Vehicle Systems Research Facility, Vertical Motion Simulator Complex, and the Airborne Operations Laboratory.